



SEQUENCE LISTING

<110> Dolly, James Oliver
Li, Yan
Chan, C.K.
Aoki, Kei Roger

<120> Activatable Recombinant Neurotoxins

<130> 17311(BO)

<140> 09/648,692

<141> 2000-08-25

<150> 60/150,710

<151> 1999-08-25

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toxin

<400> 7
Ser Lys Leu Ile Gly Leu Cys Lys Lys Ile Ile Pro Pro Thr Asn Ile
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Arg Glu Asn Leu Tyr Asn Arg Thr Ala Gly Glu Lys Leu Tyr Asp Asp
20 25 30
Asp Asp Lys Asp Arg Trp Gly Ser Ser Arg Ser Leu Thr Asp Leu Gly
35 40 45
Gly Glu Leu Cys Ile Lys Asn Glu Asp Leu Thr Phe Ile Ala Glu Lys
50 55 60
Asn

65

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<212> DNA
<213> Clostridium botulinum

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aatcaagatt acaattgggt tatatgtgat cttaatcatg atataccaaa aaagtcatat 180
ctatggatat taaaaaatat ataaatttaa aattaggaga tgctgtatat gccaaaaatt 240
aatagtttta attataatga tcctgttaat gatagaacaa ttttatatat taaaccaggc 300
ggttgtcaag aattttataa atcattttaat attatgaaaa atatttggat aattccagag 360
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gatagtagtt attatgaccc taattattta caaagtgatg aagaaaagga tagattttta 480
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gaagaactgt caaaagctaa tccatattta gggaatgata atactccaga taatcaattc 600
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<220>
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<400> 11
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37

<210> 12
<211> 36
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<400> 12
cccctgcagt catttttctt gccatccatg ttcttc 36

<210> 13
<211> 31
<212> DNA
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<220>
<223> PCR primer

<400> 13
cagttaatac attcattaca tggactatat g 31

<210> 14
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 14
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<210> 15
<211> 5
<212> PRT
<213> Site

<220>
<221> SITE
<222> (1)...(5)
<223> protease cleavage site

<400> 15
Asp Asp Asp Asp Lys
1 5

<210> 16
<211> 8
<212> PRT
<213> Site

<220>
<221> SITE
<222> (1)...(8)
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<400> 16
Leu Glu Val Leu Phe Gln Gly Pro
1 5

<210> 17
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<212> PRT
<213> Clostridium species

<220>
<221> ZN_FING
<222> (1)...(5)
<223> Xaa=any amino acid

<400> 17
His Glu Xaa Xaa His
1 5

<210> 18
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Linker

<400> 18
ggagaaaagc ttacgacga tgacgataag gatcgatggg gacacctag a 51

<210> 19
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker

<400> 19
Met Gly Gly Ser His His His His His Gly Met Ala Ser Met Thr
1 5 10 15
Gly Gly Gln Gln Val Asp
20

<210> 20
<211> 19
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<213> Clostridium botulinum

<400> 20
Ser Leu Thr Asp Leu Gly Gly Glu Leu Cys Ile Lys Ile Lys Asn Glu
1 5 10 15
Asp Leu Thr

<210> 21
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<223> Linker

<400> 21
atgagaggat cgcacaccca tcaccatcac ggatcccca aaattaatag tttt 54

<210> 22
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<220>
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<222> (2)...(3)
<223> Xaa=any amino acid

<223> Protease cleavage site

<400> 22
Glu Xaa Xaa Tyr Ser Gln Ser
1 5

<210> 23
<211> 7
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<213> Artificial Sequence

<220>
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<222> (2)...(3)
<223> Xaa=any amino acid

<221> SITE
<222> (5)...(5)
<223> Xaa=any amino acid

<223> Protease cleavage site

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1 5

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<213> Artificial Sequence

<220>

<223> Translated PCR fragment

<400> 24

Met Arg Gly Ser His His His His His His Gly Ser Pro Lys Ile Asn
1 5 10 15
Ser Thr

<210> 25

<211> 5

<212> PRT

<213> Clostridium species

<220>

<221> ZN_FING

<222> (1)...(5)

<400> 25

His Glu Leu Ile His
1 5

<210> 26

<211> 5

<212> PRT

<213> Clostridium botulinum C

<220>

<221> ZN_FING

<222> (1)...(5)

<400> 26

His Glu Leu Asn His
1 5

<210> 27

<211> 5

<212> PRT

<213> Clostridium botulinum D

<220>

<221> ZN_FING

<222> (1)...(5)

<400> 27

His Glu Leu Thr His
1 5

<210> 28

<211> 4
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)...(4)
<223> Blood coagulation factor Xa

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Ile Glu Gly Arg
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<210> 29
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<212> PRT
<213> Artifical sequence

<220>
<223> Linker

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Gly Glu Lys Leu Tyr Asp Asp Asp Asp Lys Asp Arg Trp Gly Ser Ser
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Arg